

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Claim 1 (Canceled)

2. (Currently Amended) A stator for an automotive alternator ~~according to Claim 1~~, said stator comprising:

an annular shaped stator core formed as a lamination of a plurality of sheet-shaped magnetic members, said stator core having a plurality of teeth defining a plurality of slots extending in axial directions at one side of a yoke at an inner circumference thereof, said lamination having a first end surface and a second end surface fixed directly together to form said annular shape; and

two sets of three-phase stator coils fitted into said slots, wherein 2 slots are provided for each phase of said stator coils and each magnetic pole and the total number of the slots is at least 72 or more, wherein an interval in the circumferential direction between a center of air gaps of adjacently formed slot opening portions is not the same.

3. (Previously Presented) A stator for an automotive alternator according to Claim 2, wherein said interval is a repeated electrical angle of α degrees and $(60-\alpha)$ degrees, and said α degrees is in a range of from 16 to 29 degrees.

4. (Previously Presented) A stator for an automotive alternator according to Claim 2, wherein said interval is a repeated electrical angle of α degrees and $(60-\alpha)$ degrees, and said α degrees is in a range of from 22 to 24 degrees.

5. (Previously Presented) A stator for an automotive alternator according to Claim 2, wherein said interval is a repeated electrical angle of 24 degrees and 36 degrees.

Claims 6-8 (Canceled)

9. (Previously Presented) A stator for an automotive alternator, said stator comprising:
an annular shaped stator core formed as a lamination of a plurality of sheet-shaped magnetic members, said stator core having a plurality of teeth defining a plurality of slots extending in axial directions at one side of a yoke at an inner circumference thereof, and end surfaces fixed together to complete said annular shape; and
two sets of three-phase stator coils fitted into said slots,
wherein 2 slots are provided for each phase of said stator coils and each magnetic pole and the total number of the slots is 72 or more, and

wherein widths of said teeth which define said slots alternate in size in a circumferential direction so that an interval in the circumferential direction between a center of air gaps of adjacently formed slot opening portions is an alternating electrical angle of α degrees and $(60 - \alpha)$ degrees, and said α degrees is in a range from 16-29 degrees.

10. (Previously Presented) A stator for an automotive alternator, said stator comprising:
an annular shaped stator core formed as a lamination of a plurality of sheet-shaped magnetic members, said stator core having a plurality of teeth defining a plurality of slots extending in axial directions at one side of a yoke at an inner circumference thereof, and end surfaces fixed together to complete said annular shape; and
two sets of three-phase stator coils fitted into said slots,
wherein 2 slots are provided for each phase of said stator coils and each magnetic pole and the total number of the slots is 72 or more,
wherein widths of said teeth which define said slots alternate in size in a circumferential direction, and
wherein contact surfaces of said stator core, when said stator core is connected as an annular shape, are formed by dividing a wide tooth among said teeth of alternating widths in a circumferential direction with a substantially orthogonal surface.

Claims 11 and 12 (Canceled).

13. (Previously Presented) The stator for an automotive alternator according to Claim 9, wherein said α degrees is in a range of from 22 to 24 degrees.

14. (Previously Presented) The stator for an automotive alternator according to Claim 9, wherein said interval is an alternating electrical angle of 24 degrees and 36 degrees.

15. (Previously Presented) A stator for an automotive alternator, said stator comprising:
a stator core in which a plurality of slots extending in axial directions are formed at an inner circumference thereof, a plurality of teeth defining and partitioning said slots; and
two sets of three-phase stator coils which are fitted into said slots,
wherein 2 slots are provided for each phase of said stator coils and each magnetic pole and the total number of the slots is 72 or more, and
wherein a first set of said teeth each including first and second projections extend in a circumferential direction, said first and second projections having different lengths so that an interval in a circumferential direction between a center of air gaps of adjacently formed slot opening portions between said teeth is alternated.

16. (Previously Presented) The stator for an automotive alternator according to Claim 15, wherein said interval is an alternating electrical angle of α degrees and $(60 - \alpha)$ degrees, and said α degrees is in a range from 16-29 degrees.

17. (Previously Presented) The stator for an automotive alternator according to Claim 15, wherein said interval of is an alternating electrical angle of α degrees and $(60 - \alpha)$ degrees, and said α degrees is in a range of from 22 to 24 degrees.

18. (Previously Presented) The stator for an automotive alternator according to Claim 15, wherein said interval is an alternating electrical angle of 24 degrees and 36 degrees.

Claims 19-27 (Canceled).

28. (Previously Presented) A stator for an automotive alternator, said stator comprising:
an annular shaped stator core having a plurality of teeth defining a plurality of slots extending in axial directions at one side of a yoke at an inner circumference thereof; and
two sets of three-phase stator coils fitted into said slots,
wherein an interval in the circumferential direction between a center of air gaps of adjacently formed slot opening portions is an alternating electrical angle of α degrees and $(60 - \alpha)$ degrees, and said α degrees is in a range from 16-29 degrees.

29. (Previously Presented) The stator for an automotive alternator according to claim 28, wherein said α degrees is in a range of from 22 to 24 degrees.

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30. (Previously Presented) The stator for an automotive alternator according to claim 28, wherein said interval is an alternating electrical angle of 24 degrees and 36 degrees.

31. (Previously Presented) The stator for an automotive alternator according to claim 28, wherein 2 slots are provided for each phase of said stator coils and each magnetic pole and the total number of the slots is 72 or more.

32. (Previously Presented) The stator for an automotive alternator according to claim 28, wherein widths of said teeth which define said slots alternate in size in a circumferential direction to define said alternating electrical angle.